



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5 CHICAGO REGIONAL LABORATORY
536 SOUTH CLARK STREET
CHICAGO, ILLINOIS 60605

Date: 8/12/2010

Subject: Review of Region 5 Data for R06 Deep Water Grand Isle

From: David Schroeder
Region 5 Chicago Regional Laboratory

To: Region 6, US EPA
10625 Fallstone Road
Houston, TX 77099

The data being transmitted under this cover memo successfully passed CRL's internal data review procedures as documented in our current Quality Management Plan (QMP) and appropriate Standard Operating Procedures (SOPs). Please be aware that CRL does not perform data validation which is based on your data quality objectives. This function must be performed independently of the laboratory generating the data.

Results in this report represent only the samples analyzed.

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at (312) 353-7444 for any comments or questions.

Attached are Results for: R06 Deep Water Grand Isle

_____/_____/_____
Data Management Coordinator and Date Received

Date Transmitted: ____/____/____

Analyses included in this report:

RAM-DOSS



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

ANALYSIS CASE NARRATIVE Analyst: David Schroeder (312) 353-3100

General Information

Twenty-eight samples were received by the Chicago Regional Laboratory and prepared for dioctyl sulfosuccinate (DOSS) analysis on August 10, 2010. The sample sets from Chalmete, LA were insufficient to perform matrix spike and matrix spike duplicate preparations. Kristie Warr was emailed about this sampling issue. The samples were received at or less than 6°C.

Sample Analysis and Results

Analysis of dioctyl sulfosuccinate in water by LC/MS/MS was carried out using CRL Region 5 Regional Analytical Method for Dioctyl Sulfosuccinate (RAM-DOSS, CAS 577-11-7) in Sea Water by Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

The T007-1332-100806-SW-03-1 sample, collected August 6, 2010 at 12:05 near Grand Isle, LA, contained 24.0 ppb dioctyl sulfosuccinate anion. The presence of DOSS was confirmed by the detection of the confirmatory ion. After the official analysis, the sample preparation was subsampled and analyzed, August 11, 2010. This analysis further confirmed the presence of the DOSS in the filtered sample.

Samples shipped from the samplers, with the same sample number, were not duplicates of one solution. The samples shipped as duplicates were consecutively collected co-located samples, rather than duplicates of one sample. One T007-1332-100806-SW-03-1 co-located sample was prepared and analyzed the day after the official analysis. The DOSS result for the co-located sample was less than the reporting limit (20 ppb) and method detection verification limit (6 ppb). The difference in response may be due in part to the peristaltic-pump consecutive sample collections.

DOSS is surface active. The surface activity results in DOSS adhering to many materials. Sampling techniques that expose samples to materials other than the sample container may reduce DOSS concentration in samples. Sampling techniques such as peristaltic pumping expose the sample to large surface areas compared to sample volume. DOSS association with peristaltic tubing materials likely result in bias low DOSS concentrations in laboratory samples.

The 1008015, 1008016, 1008017 and 1008018 supporting data are stored with 1008014.

Quality Control

All quality control criteria not mentioned met acceptance limits stated in the method.



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T007-0004-100808-SW-04-1	1008014-01	Water	Aug-08-10 09:55	Aug-10-10 09:02
T007-0005-100808-SW-02-1	1008014-02	Water	Aug-08-10 12:35	Aug-10-10 09:02
T007-0007-100807-SW-02-1	1008014-03	Water	Aug-07-10 12:50	Aug-10-10 09:02
T007-0008-100806-SW-03-1	1008014-04	Water	Aug-06-10 13:10	Aug-10-10 09:02
T007-0009-100806-SW-03-1	1008014-05	Water	Aug-06-10 09:55	Aug-10-10 09:02
T007-1327100807-SW-1	1008014-06	Water	Aug-07-10 11:35	Aug-10-10 09:02
T007-1331-100807-SW-02-1	1008014-07	Water	Aug-07-10 09:40	Aug-10-10 09:02
T007-1331-100807-SW-02-2	1008014-08	Water	Aug-07-10 09:40	Aug-10-10 09:02
T007-1332-100806-SW-03-1	1008014-09	Water	Aug-06-10 12:05	Aug-10-10 09:02



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS

US EPA Region 5 Chicago Regional Laboratory

T007-0004-100808-SW-04-1 (1008014-01) Water Sampled: Aug-08-10 09:55 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 137 75.0 % 50-150 " " "

T007-0005-100808-SW-02-1 (1008014-02) Water Sampled: Aug-08-10 12:35 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 129 70.9 % 50-150 " " "


T007-0007-100807-SW-02-1 (1008014-03) Water Sampled: Aug-07-10 12:50 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 133 76.4 % 50-150 " " "

T007-0008-100806-SW-03-1 (1008014-04) Water Sampled: Aug-06-10 13:10 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10


David Schroeder, Chemist



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS

US EPA Region 5 Chicago Regional Laboratory

T007-0008-100806-SW-03-1 (1008014-04) Water Sampled: Aug-06-10 13:10 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Surrogate: DOSS-D34	129			73.6 %		50-150	B100840	Aug-10-10	Aug-10-10

T007-0009-100806-SW-03-1 (1008014-05) Water Sampled: Aug-06-10 09:55 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 114 65.6 % 50-150 " " "

T007-1327100807-SW-1 (1008014-06) Water Sampled: Aug-07-10 11:35 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10


Surrogate: DOSS-D34 164 82.1 % 50-150 " " "

T007-1331-100807-SW-02-1 (1008014-07) Water Sampled: Aug-07-10 09:40 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 150 82.4 % 50-150 " " "

T007-1331-100807-SW-02-2 (1008014-08) Water Sampled: Aug-07-10 09:40 Received: Aug-10-10 09:02


David Schroeder, Chemist



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS

US EPA Region 5 Chicago Regional Laboratory

T007-1331-100807-SW-02-2 (1008014-08) Water Sampled: Aug-07-10 09:40 Received: Aug-10-10 09:02


Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	U		20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 155 85.0 % 50-150 " " "

T007-1332-100806-SW-03-1 (1008014-09) Water Sampled: Aug-06-10 12:05 Received: Aug-10-10 09:02

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	24.0			20.0	ug/L	1	B100840	Aug-10-10	Aug-10-10

Surrogate: DOSS-D34 130 71.8 % 50-150 " " "


David Schroeder, Chemist



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100840 - *** DEFAULT PREP ***

Blank (B100840-BLK1)

Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U	U		20.0	ug/L						

Surrogate: DOSS-D34 239 " 200.0 120 50-150

LCS (B100840-BS1)

Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Surrogate: DOSS-D34	187				ug/L	202.0		92.4	50-150		

LCS Dup (B100840-BSD1)

Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	200			20.0	ug/L	200.0		99.8	50-150	0.221	30

Surrogate: DOSS-D34 188 " 200.0 94.0 50-150

Duplicate (B100840-DUP1)

Source: 1008014-01

Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
---------	--------	-----------------------	-----	--------------------	-------	----------------	------------------	------	----------------	-----	--------------



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100840 - *** DEFAULT PREP ***

Duplicate (B100840-DUP1)				Source: 1008014-01				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U	U		20.0	ug/L		U				200

Surrogate: DOSS-D34 127 " 180.2 70.5 50-150

Duplicate (B100840-DUP2)				Source: 1008014-05				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U	U		20.0	ug/L		U				200

Surrogate: DOSS-D34 110 " 175.4 62.9 50-150

Duplicate (B100840-DUP3)				Source: 1008014-06				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U	U		20.0	ug/L		U				200

Surrogate: DOSS-D34 142 " 181.8 78.4 50-150



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100840 - *** DEFAULT PREP ***

Matrix Spike (B100840-MS1)				Source: 1008014-01				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	136			20.0	ug/L	181.0	U	75.0	50-150		

Surrogate: DOSS-D34 118 " 181.0 65.1 50-150

Matrix Spike (B100840-MS2)				Source: 1008014-05				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	130			20.0	ug/L	175.4	U	74.3	50-150		

Surrogate: DOSS-D34 95.5 " 175.4 54.5 50-150

Matrix Spike (B100840-MS3)				Source: 1008014-06				Prepared & Analyzed: Aug-10-10			
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	149			20.0	ug/L	183.5	U	81.2	50-150		

Surrogate: DOSS-D34 132 " 183.5 72.2 50-150

Matrix Spike Dup (B100840-MSD1) Source: 1008014-01 Prepared & Analyzed: Aug-10-10



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100840 - *** DEFAULT PREP ***

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	150			20.0	ug/L	173.9	U	86.0	50-150	9.59	30

Surrogate: DOSS-D34 116 " 173.9 67.0 50-150

Matrix Spike Dup (B100840-MSD2) Source: 1008014-05 Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	131			20.0	ug/L	173.9	U	75.6	50-150	0.822	30

Surrogate: DOSS-D34 112 " 173.9 64.6 50-150

Matrix Spike Dup (B100840-MSD3) Source: 1008014-06 Prepared & Analyzed: Aug-10-10

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	146			20.0	ug/L	181.8	U	80.1	50-150	2.18	30

Surrogate: DOSS-D34 129 " 181.8 71.2 50-150



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Analysis by LC MS MS - Quality Control
US EPA Region 5 Chicago Regional Laboratory



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA
10625 Fallstone Road
Houston TX, 77099

Project: R06 Deep Water Grand Isle
Project Number: T0033-100403-20100806-009
Project Manager: Kristie Warr

Reported:
Aug-12-10 11:31

Notes and Definitions

U Not Detected
NR Not Reported